

**AMENDMENTS TO THE CLAIMS/LISTING OF CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method of treating **acute** pancreatitis in a mammalian subject comprising administering to said subject an effective amount of an amylin or an amylin analog, wherein the amylin analog has amylin agonist activity, **wherein said treating comprises reducing or inhibiting the level of inflammation, enzymatic activity or enzymatic secretion in pancreatic cells.**
- 2-5. (Cancelled)
6. (Original) The method of claim 1 wherein said subject is a human.
- 7-8. (Cancelled)
9. (Original) The method of claim 1 wherein said amylin analog is <sup>25,28,29</sup>Pro-h-amylin.
- 10-13. (Cancelled)
14. (Currently amended) A method of improving a treatment for **acute** pancreatitis in a mammalian subject comprising administering to said subject an amylin or an amylin analog in addition to an agent or regimen used to treat **acute** pancreatitis, wherein said amylin analog has amylin agonist activity, **and wherein said improving a treatment comprises reducing or inhibiting the level of inflammation, enzymatic activity or enzymatic secretion in pancreatic cells.**
15. (Original) The method of claim 14 wherein said agent is clinically used to treat pancreatitis.
16. (Original) The method of claim 14 wherein said subject is a human.
17. (Previously presented) The method of claim 14 wherein said amylin analog is

<sup>25,28,29</sup>Pro-h-amylin.

18. (Original) The method of claim 14 further comprising administering to said subject an analgesic.
19. (Original) The method of claim 14 wherein the agent is a pancreatic enzyme.
20. (Original) The method of claim 14 wherein the regime includes a low-fat diet.
21. (Withdrawn) The method of claim 1 wherein said amylin analog has the amino acid sequence: <sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>I<sub>1</sub>-J<sub>1</sub>-Leu-K<sub>1</sub>-L<sub>1</sub>-<sup>30</sup>Thr-M<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z (SEQ ID NO:2) wherein
- A<sub>1</sub> is Lys, Ala, Ser or hydrogen;
  - B<sub>1</sub> is Ala, Ser or Thr;
  - C<sub>1</sub> is Val, Leu or Ile;
  - D<sub>1</sub> is His or Arg;
  - E<sub>1</sub> is Ser or Thr;
  - F<sub>1</sub> is Ser, Thr, Gln or Asn;
  - G<sub>1</sub> is Asn, Gln or His;
  - H<sub>1</sub> is Phe, Leu or Tyr;
  - I<sub>1</sub> is Ala or Pro;
  - J<sub>1</sub> is Ile, Val, Ala or Leu;
  - K<sub>1</sub> is Ser, Pro, Leu, Ile or Thr;
  - L<sub>1</sub> is Ser, Pro or Thr;
  - M<sub>1</sub> is Asn, Asp, or Gln;
- X and Y are independently selected amino acid residues having side chains which are chemically bonded to each other to form an intramolecular linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy, or aralkyloxy; and provided that when
- (a) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Phe,

I<sub>1</sub> is Ala, J<sub>1</sub> is Ile, K<sub>1</sub> is Ser, L<sub>1</sub> is Ser, and M<sub>1</sub> is Asn;

(b) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Ile, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Ala, J<sub>1</sub> is Ile, K<sub>1</sub> is Ser, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn;

(c) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Thr, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Ala, J<sub>1</sub> is Ile, K<sub>1</sub> is Ser, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn;

(d) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val, K<sub>1</sub> is Pro, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn;

(e) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Asn, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val, K<sub>1</sub> is Ser, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn; or

(f) A<sub>1</sub> is Lys, B<sub>1</sub> is Thr, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is His, H<sub>1</sub> is Leu, I<sub>1</sub> is Ala, J<sub>1</sub> is Ala, K<sub>1</sub> is Leu, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asp; then one or more of A<sub>1</sub> to M<sub>1</sub> is a D-amino acid and Z is not amino.

22. (Withdrawn) The method of claim 14 wherein said amylin analog has the amino acid sequence: <sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>I<sub>1</sub>-J<sub>1</sub>-Leu-K<sub>1</sub>-L<sub>1</sub>-<sup>30</sup>Thr-M<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z (SEQ ID NO:2) wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ala or Pro;

J<sub>1</sub> is Ile, Val, Ala or Leu;

K<sub>1</sub> is Ser, Pro, Leu, Ile or Thr;

L<sub>1</sub> is Ser, Pro or Thr;

M<sub>1</sub> is Asn, Asp, or Gln;

X and Y are independently selected amino acid residues having side chains which are chemically bonded to each other to form an intramolecular linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy, or aralkyloxy; and provided that when

- (a) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Phe, I<sub>1</sub> is Ala, J<sub>1</sub> is Ile, K<sub>1</sub> is Ser, L<sub>1</sub> is Ser, and M<sub>1</sub> is Asn;
- (b) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Ile, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Ala, J<sub>1</sub> is Ile, K<sub>1</sub> is Ser, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn;
- (c) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Thr, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Ala, J<sub>1</sub> is Ile, K<sub>1</sub> is Ser, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn;
- (d) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val, K<sub>1</sub> is Pro, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn;
- (e) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Asn, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val, K<sub>1</sub> is Ser, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asn; or
- (f) A<sub>1</sub> is Lys, B<sub>1</sub> is Thr, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is His, H<sub>1</sub> is Leu, I<sub>1</sub> is Ala, J<sub>1</sub> is Ala, K<sub>1</sub> is Leu, L<sub>1</sub> is Pro, and M<sub>1</sub> is Asp; then one or more of A<sub>1</sub> to M<sub>1</sub> is a D-amino acid and Z is not amino.

23-26. (Canceled)

27. (Previously presented) The method of claim 1 wherein 0.1 µg to 1 mg of said amylin or said amylin analog is administered to said mammalian subject in a single, divided, or continuous dose.

28. (Previously presented) The method of claim 14 wherein 0.1 µg to 1 mg of said amylin or said amylin analog is administered to said mammalian subject in a single, divided, or continuous dose.

29. (Previously presented) The method of claim 1 wherein about 2 µg to about 8 mg per day of said amylin or said amylin analog is administered to said mammalian subject.

30. (Previously presented) The method of claim 14 wherein about 2  $\mu$ g to about 8 mg per day of said amylin or said amylin analog is administered to said mammalian subject.